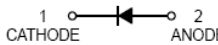
Schottky Barrier Diode

TB5817WSH

FEATURES

- Extremely low V_F
- Low stored change, majority carrier conduction
- Low power loss/high efficient
- MSL 1
- Halogen free
- Qualified to AEC-Q101 standards for high reliability

HF



SOD-323

APPLICATIONS

- For Use In Low Voltage, High Frequency Inverters
- Free Wheeling, And Polarity Protection Applications

ORDERING INFORMATION

Type No.	Marking	Package Code
TB5817WSH	SJH	SOD-323

MAXIMUM RATING @ Ta=25℃ unless otherwise specified

Parameter	**Symbol**	**Value**	**Unit**
Non-Repetitive Peak reverse voltage	V_{RM}	24	V
Peak repetitive Peak reverse voltage Working Peak Reverse voltage DC Reverse Voltage	V_{RRM} V_{RWM} V_R	20	V
RMS Reverse Voltage	$V_{R(RMS)}$	14	V
Average Rectified output Current	I_o	1	A
Peak forward surge current@=8.3ms	I_{FSM}	10	A
Power Dissipation	P_d	235	mW
Thermal Resistance Junction to Ambient	$R_{\theta JA}$	532	℃/W
Junction and Storage Temperature Rage	T_J,T_{STG}	-65 to +150	℃

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ELECTRICAL CHARACTERISTICS @ Ta=25℃ unless otherwise specified

Parameter	Symbol	Test Condition	MIN	MAX	UNIT
Reverse breakdown voltage	$V_{(BR)}$	I_R=1mA	20		V
Reverse voltage leakage current	I_R	V_R=20V		1	mA
Forward voltage	V_F	I_F=1A I_F=3A		0.50 0.75	V
Diode capacitance	C_D	V_R=4V,f=1MHz		120	pF

TYPICAL CHARACTERISTICS @ Ta=25℃ unless otherwise specified

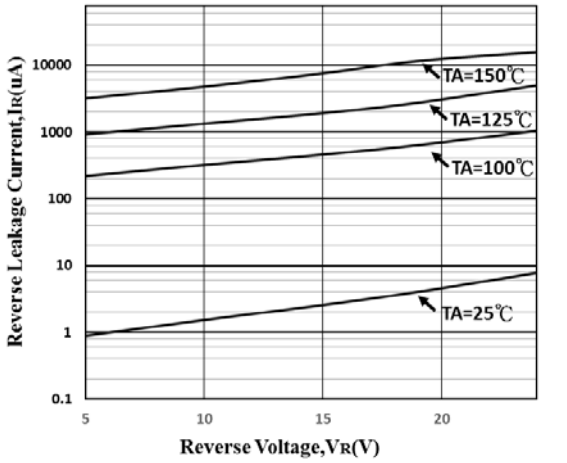

FIG 1. Typical Reverse Characteristic

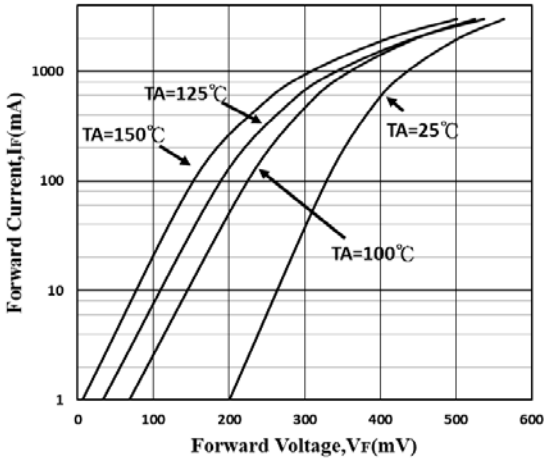

FIG 2. Typical Forward Characteristic

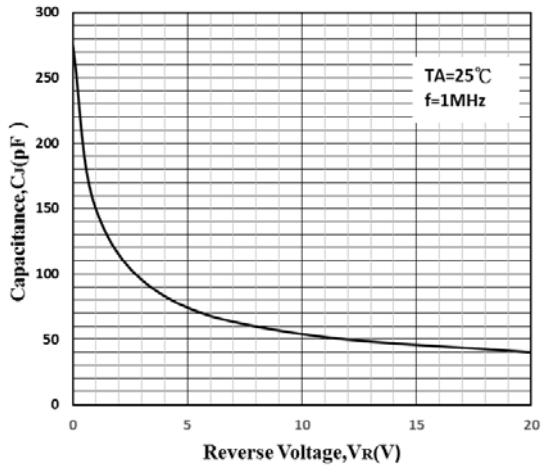

FIG 3. Capacitance vs Reverse Voltage

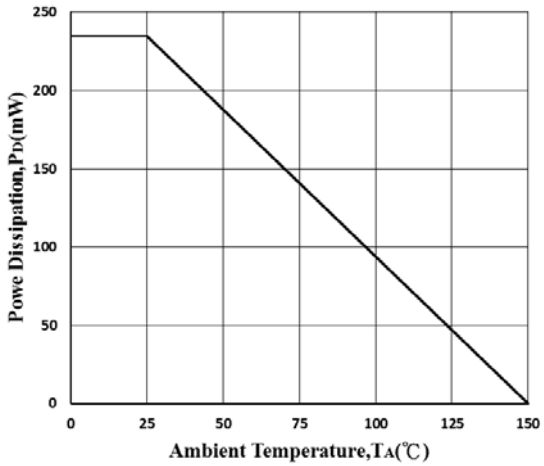

FIG 4. Power Derating Curve

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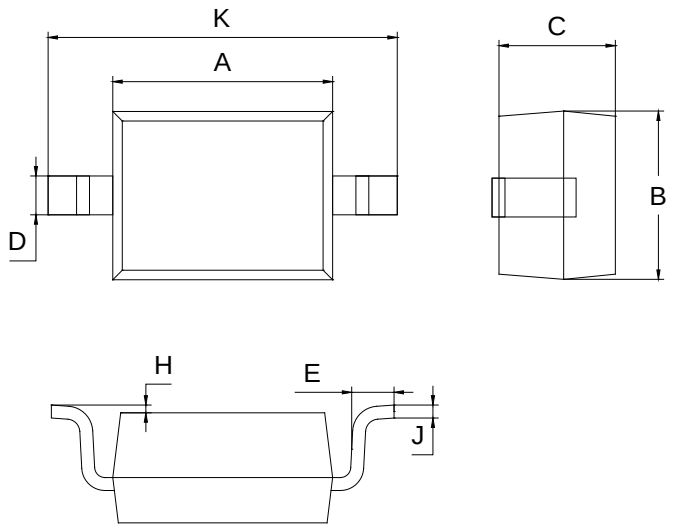
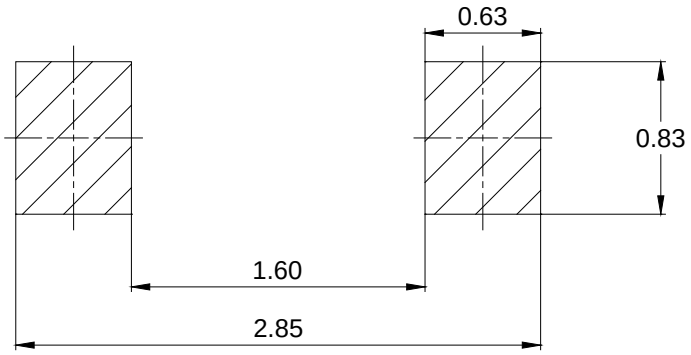
PACKAGE OUTLINE

Plastic surface mounted package SOD-323



SOD-323		
Dim	Min	Max
A	1.60	1.80
B	1.20	1.40
C	0.80	0.90
D	0.25	0.35
E	0.22	0.42
H	0.02	0.1
J	0.05	0.15
K	2.55	2.75
All Dimensions in mm		

SOLDERING FOOTPRINT



Unit: mm

PACKAGE INFORMATION

Device	Package	Shipping
TB5817WSH	SOD-323	3000pcs / Tape & Reel